TENDRING RURAL DISTRICT COUNCIL

29 DEC 1954

ANNUAL REPORT

of the

MEDICAL OFFICER
OF HEALTH

FOR 1953

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE
LIBRARY
20 FEB 1968

Printed by
E. N. Mason & Sons, Ltd.,
Colchester & London.

Tendring Rural District Council

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR 1953.

Chairman :
Mr. J. A. CULLEY.

Vice-Chairman :
Rev. P. N. H. PALMER.

MEMBERS OF THE PUBLIC HEALTH COMMITTEE

Chairman :
Mrs. M. C. WRIGHT.

Vice-Chairman :
Mr. H. R. CARTER.

Mr. F. W. AYLMORE
Mr. A. J. BRETT
Mr. P. J. COLE
Mr. J. A. CULLEY
Miss K. DANIELS
Mr. A. FULLER
Mr. C. P. HARVEY
Mr. E. LOWE
Mr. G. K. MITCHELL

Mr. L. G. NEWMAN
Mr. H. M. POOLE
Rev. P. N. H. PALMER
Mr. E. J. ROGERS
Mr. W. H. ROSE
Mr. G. S. SARSON
Mr. L. H. THOMAS
Mr. W. H. SEXTON
Mr. A. D. WHITEHEAD

PUBLIC HEALTH OFFICERS

F. L. GROARKE, M.B., B.Ch., B.A.O., L.M., D.P.H., D.C.H., Medical Officer of Health.
*G. W. YEARSLEY, M.R.San.I., M.S.I.A., Chief Sanitary Inspector.
*L. W. ECKERSLEY. M.R.San.I., M.S.I.A., D.P.A. Deputy Chief Sanitary Inspector.
Miss V. G. HENAGULPH, Clerk to the Medical Officer of Health.
R. G. DEBNAM, Clerk to the Sanitary Inspector.

Mr. T. R. Hicks, Deputy Chief Sanitary Inspector until 31st March, 1953, left to take up an appointment with the Essex River Board.

* Cert. S.I.J.B., and Cert. R.San.I. Meat and Other Foods Inspection.

Council Offices,
Weeley,
Clacton-on-Sea.

June, 1954.

To the Chairman and Members of the
Tendring Rural District Council.

Ladies and Gentlemen,

As Medical Officer of Health for the District I have the honour to present my Annual Report for the year 1953.

The vital statistics for 1953 are set out herein, and these may be said to represent a satisfactory trend in so far as the general health of the population is concerned. However, it should be realised that the annual statistics are liable to considerable variation from year to year, as a small increase or decrease in numbers can cause material fluctuations in calculated yearly rates in a district such as this, therefore, average rates taken over a five year period are considered to be of greater significance.

For the fifth year in succession our infantile mortality rate (death of infants under one year of age per 1,000 live births) is lower than the national figure, and the average for the five year period 1949-53 is only 15.8 compared with the average rate of 29.1 for England and Wales during the same period and with a rate of 125 for this district in the year 1901. This gratifying figure appears to indicate that a high standard of child care is being maintained in the district. The fluctuation in numbers referred to above, however, appears to have played havoc with our still birth rate for the year, which is almost fifty per cent higher than the rate for the Country generally, despite good figures for the previous four years. This setback is more likely to have been caused by chance variation rather than by any shortcomings in the maternity services, but it gives me the opportunity to continue to stress the imperative need for all pregnant women to seek and obtain frequent and skilled supervision of their pregnancy and child birth if they are to produce healthy children and continue to remain healthy themselves.

We were fortunate in that we had a low incidence of the more serious infectious disease and, with the exception of measles, our notification rates for the common infectious diseases were lower than the national figures.

It does not appear likely that many houses for letting purposes will, in future, be built by private individuals as financial investments, and unless large financial concerns interest themselves in building Council type houses rather than in attempting to purchase blocks already erected, it appears that Local Housing Authorities cannot expect other than to become bigger and bigger landlords.

The numbers of persons on the Council's waiting list for houses remains at 800, and there are many occupied houses in the district which are unfit for human occupation—evidence that bad housing conditions and a shortage of fit houses remain the most pressing problem facing the Council. Houses are required both for new families as they come along, and for the replacement of slum properties. Therefore, any drastic cut made in the house building and replacement programme at this time would very seriously impede and complicate the solving of this vital problem.

Adequate housing is not merely an amenity, it is a basic factor in promoting the mental and physical health of a community, yet despite our great need in this respect, the comparatively small amount of 8d. from a total rate of £1 1s. 0d. is allocated to the purpose, which is 3d. less than the total spent on scavenging the district. The lions share of the rate, of course, is taken by the County Council and expended by them on many services, some of which are basically less essential than housing. Possibly we are in danger of losing our sense of proportion by placing higher values on non-essentials at the expense of the elementary requisites for healthy living. Oscar Wilde once remarked " Give me the luxuries of life and I will do without the necessities."

Some progress is being made to re-house families from unfit dwellings but, unless a systematic and well ordered scheme for the organised replacement of all slum property is put into operation, it would appear that we shall continue to nibble at the problem in a piecemeal way. Many of the unfit dwellings are occupied by elderly people. The erection of more bungalows for aged persons would do much towards solving the problem, and at cheaper cost ; but such bungalows should be sited, as far as possible, amongst the local community with whom the old people previously lived, to avoid the loneliness and depression so often experienced by the elderly who have been rehoused amongst strangers distant from their familiar environment.

It is hoped that rent revision will do something to encourage the repair of many poor dwellings in order to avoid continued deterioration which, in course of time, merely adds more and more to the list of dwellings needing replacement. Whether the proposed rent revision will encourage owners of low rated property remains to be seen, but it would appear to be doubtful. Indeed, for a long time, many owners of the poorer types of dwellings have ceased to regard them as economic to maintain, and the increase permitted with low rated property is very small compared to the cost involved. Furthermore it is the very low rented dwellings that entail the highest repair costs.

The Council also has to face expensive sewerage schemes in various parts of the district to meet the present day problems of dealing with house drainage now that water supplies and modern sanitary arrangements are generally provided throughout the district.

Methemoglobinemia in babies, due to nitrate contaminated shallow well water, was found during the year for the first time in this area. Two cases were discovered, affecting very young bottle fed infants. A description of the condition is given later in this report as well as a summary of the action taken by the Council to prevent, as far as possible, a recurrence of such cases.

In presenting this report I wish to thank the Council for the full support accorded me throughout the year and, also, to express my appreciation for the unfailing help and co-operation received from the Officers and Departments of the Council. Public Health work to-day is the product of the skills of many trained and professional persons who collaborate their various duties to the purpose of reducing the incidence of disease amongst the community, and I would commend to your attention those who devote themselves to this good work in the area of your authority.

I am,

Your obedient servant,

F. L. GROARKE,

Medical Officer of Health.

SECTION A

STATISTICAL MEMORANDUM FOR THE RURAL DISTRICT OF TENDRING

Area in Acres	65,884
Population :	
1953 Registrar General's Estimate	24,810
1951 Census	24,434
Density of Population per acre	.36
Rateable Value	£113,833
Sum represented by penny rate (1953-4)	£460
Number of inhabited dwellings (approx.)	8,000
Census 1951	7,431
Total Live Births	344
Birth Rate	13.8
Birth Rate corrected	15.6
Total Still Births	12
Still birth rate	33.7
Total Deaths	359
Death rate	14.4
Death rate corrected	11.1
Deaths of infants under 1 year of age	5
Infantile Mortality Rate	13.9
Number of Illegitimate Births	11
Percentage of Total Births	3.2
Deaths from Diarrhoea (under 2 years of age)	Nil
Cancer Deaths	55
Tuberculosis Deaths	4

EXTRACT FROM THE 1951 CENSUS REPORT.

The population of Essex has grown from 1,755,459 in 1931 to the present figure of 2,044,964. This number live in 572,567 houses.

The nationality per 1,000 of the total population is as follows :

BIRTHPLACE

England	879
Wales	64
Ireland	14
Scotland	13
Isle of Man and Channel Islands....	1
Colonies	8
Foreign Countries	15
Not stated	6

The Rural District of Tendring covers an area of 65,884 acres. 24,434 persons populate the district, of which 11,979 are males, and 12,445 are females, giving 0.37 persons to an acre.

7,431 structually separate dwellings house 7,515 private households giving a density of occupation of persons per room of 0.68.

129 persons occupy 66 one roomed dwellings.

726 persons occupy 329 two roomed dwellings.

Distribution per 1,000 households by rooms occupied.

Rooms	1	2	3	4	5	6	7	8	9	10 or more
Households	9	44	93	329	359	98	28	28	—	12

Of the total number of households :

2,416 are without a piped water supply.
4,420 are without a fixed bath.
3,215 are without a water closet.
1,344 are without a kitchen sink.
220 are without a cooking stove.
2,466 households have all five above arrangements.

TENDRING RURAL DISTRICT

	Total Population	
	Males	Females
Total	11,979	12,455
Married	6,282	6,327
Single	5,144	4,829
Widowed	507	1,240
Divorced	46	59
AGE		
0—4	1,052	1,018
5—9	903	847
10—14	838	825
15—19	644	749
20—24	678	716
25—29	765	819
30—34	799	797
35—39	885	809
40—44	884	879
45—49	915	863
50—54	717	771
55—59	622	756
60—64	620	765
65—69	575	610
70—74	486	497
75—79	313	362
80—84	177	233
85—89	57	104
90—94	6	30
95 and over	3	5

Ages Single Years under 21.

AGE Last Birthday	Males	Females
0–20	3,550	3,584
0	178	165
1	199	172
2	203	212
3	223	215
4	249	251
5	187	175
6	201	187
7	202	162
8	161	156
9	152	167

AGE Last Birthday	Males	Females
10	153	136
11	172	172
12	175	166
13	156	173
14	182	178
15	147	163
16	156	143
17	132	155
18	114	145
19	95	143
20	113	145

Social Class Distribution of Occupied and Retired Males aged 15 and over.

Total Males 15 years and over 8,780	Social Class				
	I	II	III	IV	V
	176	1,369	3,611	2,459	1,165
Proportions per 1,000 total	20	156	411	280	133

Class I — Professional, etc. Occupations.

Class II — Intermediate Occupations.

Class III — Skilled Occupations.

Class IV — Partly Skilled Occupations.

Class V — Unskilled Occupations.

VITAL STATISTICS

(a) LIVE BIRTHS:

	Male	Female	Total
Legitimate	156	177	333
Illegitimate	4	7	11
	160	184	344

Birth Rate .... 13.8 per 1,000 population
Birth Rate (England & Wales) 15.5 per 1,000 population

344 babies were born during the year, which is 15 less than the number of deaths. The birth rate, at 13.8, is appreciably lower than the figure of 15.5 for England and Wales.

The birth rate for a district is dependent on the proportion of married women of child bearing age to the total population. This proportion varies from place to place, being high in large centres of population, and industrial areas, and low in rural areas and non-industrial seaside towns. For purposes of comparing the birth rate of various districts the Registrar General corrects this inequality in age groups by issuing a comparability factor for all districts. The figure of 1.13 has been ascribed to this area. Taking this figure into account gives what is known as the corrected birth rate of 15.6. This rate compares closely with the national figure.

(b) STILL BIRTHS :

Babies born dead after the seventh month of pregnancy are termed still births. Many such births are inevitable in that the foetus is so congenitally malformed as to lack organs vital to life, and nature therefore discards them. It is generally accepted that a figure much lower than twenty still births per 1,000 total live births cannot be expected. However, a high figure may be an indication that the mothers did not receive the frequent and skilled supervision of their pregnancy and child birth which is so necessary if babies are to be born alive and healthy, and the mothers health preserved. Few mothers die nowadays as a result of pregnancy and child birth, but many still suffer from chronic ill health as a consequence.

(c) DEATHS :

The total number of deaths registered during the year and ascribed to this rural district was 359, of which 200 were males, and 159 were females. This is equal to a death rate of 14.4 per 1,000 population compared to a rate of 11.4 for the country generally. Our high rate is due to the fact that one have a high proportion of persons in the older age groups. The Registrar General's comparability factor of 0.77 gives a corrected death rate of 11.1 which figure is below the national figure. 72 per cent of the persons who died had attained an age of 65 years or over.

Diseases of the heart and arteries preponderate as the cause of death, accounting for 205 of the total of 359 deaths, a percentage of 57.

The number of deaths of children under 1 year since 1920 :

1920	25	1937	7
1921	25	1938	13
1922	19	1939	8
1923	14	1940	15
1924	20	1941	17
1925	22	1942	16
1926	16	1943	12
1927	9	1944	12
1928	12	1945	10
1929	21	1946	15
1930	19	1947	16
1931	10	1948	15
1932	14	1949	8
1933	14	1950	4
1934	16	1951	2
1935	20	1952	9
1936	20	1953	5

(e) Among the principal causes of death are the following :—

Heart Disease	91
Intracranial Vascular Lesions	74
Cancer	55
Coronary Artery Disease	40
Bronchitis	13
Accidents	10

TABLE I.

DEATHS AT VARIOUS AGES DURING 1953.

Under 1 year	5
1 and under 2 years	1
2 and under 5 years	2
5 and under 15 years	1
15 and under 25 years	1
25 and under 35 years	4
35 and under 45 years	7
45 and under 55 years	24
55 and under 65 years	44
65 and under 75 years	79
75 and upwards	191
	359

TABLE II.

CAUSES OF DEATH DURING 1953.

Causes of Death	Male	Female	Total
Tuberculosis, respiratory	3	1	4
Tuberculosis, other forms	0	0	0
Other infective and parasitic diseases	1	1	2
Cancer (all sites)	29	26	55
Diabetes	4	1	5
Vascular lesions of nervous system	35	39	74
Coronary Artery disease	26	14	40
Other heart disease	50	41	91
Other circulatory diseases	6	0	6
Influenza	1	7	8
Pneumonia	5	1	6
Bronchitis	7	6	13
Other diseases of respiratory system	2	1	3
Ulcer of stomach and duodenum	3	2	5
Nephritis and nephrosis	1	1	2
Hyperplasia of prostate	1	0	1
Congenital malformations	2	1	3
Other defined and ill-defined diseases	17	14	31
Motor vehicle accidents	2	0	2
All other accidents	5	3	8
	200	159	359

TABLE III.

INFANTILE DEATHS

The following table shows the cause of, and the ages at death, of the five infantile deaths registered :—

	Under 1 day	1 day to 1 week	1 week to 1 month	1 month to 6 months	Total
Broncho-Pneumonia	—	—	—	1	1
Atelectasis	1	1	—	—	2
Cerebral Haemorrhage	1	—	—	—	1
Haemorrhagic disease of newborn	—	—	1	—	1
Totals	2	1	1	1	5

TABLE IV.

COMPARATIVE STATISTICS

Birth rates, Death rates, Analysis of Mortality, Maternal Mortality and Case rates for certain Infectious Diseases in the Year 1953. Provisional figures based on Quarterly Returns.

Rates per 1,000 Population.

	T.R.D.C.	England & Wales
Births :		
Live Births	13.8	15.5
Still Births	0.48	0.35
Deaths :		
All Causes	14.4	11.4
Typhoid and Paratyphoid	0.00	0.00
Whooping Cough	0.00	0.01
Diphtheria	0.00	0.00
Tuberculosis	0.16	0.20
Influenza	0.32	0.16
Smallpox	0.00	0.00
Acute poliomyelitis (including polio-encephalitis)	0.00	0.01
Pneumonia	0.24	0.55
Notifications (Corrected)		
Typhoid Fever	0.00	0.00
Paratyphoid Fever	0.00	0.01
Meningococcal Infection	0.04	0.03
Scarlet Fever	1.28	1.39
Whooping Cough	2.36	3.58
Diphtheria	0.00	0.01
Erysipelas	0.08	0.14
Smallpox	0.00	0.00
Measles	14.52	12.36
Acute Poliomyelitis (including Polio-encephalitis) Paralytic	0.04	0.07
Non-paralytic	0.00	0.04
Food Poisoning	0.04	0.24
Deaths :		
Rates per 1,000 Live Births.		
All causes under 1 year of age	13.9	26.8
Enteritis and Diarrhoea under 2 years of age	0.00	1.1
Notifications (Corrected)		
Rates per 1,000 (Live and Still) Births :		
Puerperal Fever and Pyrexia	0.00	18.23

MATERNAL MORTALITY IN ENGLAND & WALES

Cause	Number of Deaths		Rates per 1,000 Total (Live & Still) Births		Rates per million women aged 15-44	
	T.R.D.C.	Eng. & Wales	T.R.D.C.	Eng. & Wales	T.R.D.C.	Eng. & Wales
Sepsis of pregnancy, child-birth and the puerperium	0.00	68	0.00	0.10		
Abortion with toxaemia	0.00	7	0.00	0.01		1
Other toxaemias of pregnancy and the puerperium	0.00	166	0.00	0.24		
Haemorrhage of pregnancy and childbirth	0.00	90	0.00	0.13		
Abortion without mention of sepsis or toxaemia	0.00	30	0.00	0.04		3
Abortion with sepsis	0.00	39	0.00	0.06		4
Other complications of pregnancy, childbirth and the puerperium	0.00	125	0.00	0.18		

SECTION B

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA

(a) STAFFING

(i) The Medical Officer of Health holds the following appointments : Medical Officer of Health to the Rural District of Tendring, and to the Urban Districts of Clacton, Brightlingsea, Frinton and Walton.

Essex County Council :

Assistant County Medical Officer and Assistant School Medical Officer.

(ii) Sanitary Inspectors :

Two Sanitary Inspectors only are employed for this large rural area, and with so few staff it cannot be expected that the whole range of duties can be dealt with thoroughly, and to the extent that could be desired. The inspection of meat for human consumption is a very important duty of the department and should be done thoroughly in every case, and if so done, the position will so worsen when private slaughtering is resumed by a number of local butchers. When the extent of slaughtering is known we may be obliged to engage an additional inspector.

(b) LABORATORY FACILITIES

Pathological specimens are examined at the Laboratory, Essex County Hospital, Colchester.

Samples of water, sewerage, etc., for chemical analysis are sent to the Counties Public Health Laboratories, 66, Victoria Street, London, S.W.1.

The bacteriological examination of water supplies, milk supplies, ice cream, etc., is carried out at the Public Health Laboratory, Ipswich.

It is necessary for the health department of any authority to make full use of the laboratory facilities in the area, and I would like to express my appreciation for the co-operation and help which this department has received from the staff of these laboratories.

(c) HEALTH SERVICES PROVIDED BY THE ESSEX COUNTY COUNCIL

(i) Nursing in the Home.
(ii) Midwives.
(iii) Health Visitors.
(iv) Home Helps.
(v) Immunisation.
(vi) Clinics.
(vii) School Medical Service.
(viii) Ambulance Service.

Maternity and Child Welfare :—

Ardleigh, Wesleyan School Room, Colchester Road: Second Thursday 2.00 to 4.30 p.m.

Great Bentley, Senior School: Fourth Tuesday 3 to 5 p.m.

Frating, Village Hall, Colchester Road: First Friday 2 to 4 p.m.

Mistley, The Institute: Every Friday 2 to 4.30 p.m.

St. Osyth, The Johnson Institute: Second Tuesday 2 to 4 p.m.

Parkeston, Wesleyan School, Garland Road: Third Tuesday 2.30 to 4.30 p.m.

Thorpe-le-Soken, Women's Institute, Main Road: Second and Fourth Wednesdays 2.30 to 4.30 p.m.

Weeley, Combined County Clinic: First and Third Fridays 2 to 4 p.m.

Wix, The Chapel Room, Main Road: Second Monday 2 to 4.30 p.m.

Diphtheria immunisations are carried out at all the above Clinics.

Minor Ailments Clinics :

School children attend at the conclusion of the Child Welfare Clinic at Weeley, Parkeston and Mistley.

Special Clinics :

Ophthalmic, Orthopaedic and Child Guidance Clinics, to which children residing in the Rural District Area can attend, are held at Colchester, Clacton-on-Sea and Harwich.

Ante-Natal and Post-Natal Clinic :

Combined Clinic, Weeley: First and Third Thursday 2.30 to 4.30 p.m.

Dental Clinic :

Weeley: When necessary.

Speech Therapy :

Mistley Institute: Every Monday 1.30 to 4 p.m.

(d) HEALTH SERVICES PROVIDED BY THE REGIONAL HOSPITAL BOARD

(i) Tuberculosis.

A chest clinic is held at 2 Shewell Road, Colchester daily and on Friday mornings at the Combined Treatment Centre, Skelmersdale Road, Clacton.

(ii) Venereal Diseases.

Facilities are provided at the Essex County Hospital, Colchester, and at Harwich.

(iii) Hospital for the Chronic Sick, Heath Hospital, Tendring.

(iv) Myland Hospital, Colchester.

Admit cases of infectious disease which occur in this district.

(v) Maternity Hospital, Lexden Road, Colchester.
Admit maternity cases from this area.

(vi) General Hospitals

Which cater for this area are situated at Colchester, Clacton and Harwich.

THE NATIONAL ASSISTANCE ACT, 1948.
THE NATIONAL ASSISTANCE AMENDMENT ACT, 1951.

These Acts give the Local Authority and its Medical Officer of Health power to remove to hospital persons who are aged, infirm and physically incapacitated, and who are unable to devote to themselves and are not receiving from other persons proper care and attention. Under the first mentioned Act the Council makes an application to the Court where both Council and person concerned are heard, and the Court makes the order, if it thinks fit for a maximum period of three months. The order can be renewed by the Court on the application of the Council.

Under the Amendment Act the Medical Officer of Health and another doctor, usually the person's own doctor, make a formal application to a magistrate who may sign an order empowering the Medical Officer of Health to secure the removal of urgent and necessitous cases to hospital and their detention therein for a period not exceeding three weeks.

SECTION C

WATER SUPPLIES

INFANT METHEMOGLOBINEMIA DUE TO NITRATE CONTAMINATED WATER

The number of shallow wells in use for the supply of water for domestic purposes in this district totals approximately 1,500 despite an extensive network of water mains. Such wells are vulnerable to pollution, and have figured in many outbreaks of infectious disease. Sanitarians everywhere view with suspicion such wells as a source of a pure and wholesome water supply, particularly where they serve more than one household.

Attention was focussed on a further hazard as a result of the occurrence in the district of two cases of methemoglobinemia in infants due to nitrate contaminated water from shallow wells being used in the preparation of the infants feeds. This condition, which had never been previously reported in this district, although cases had occurred recently in neighbouring Suffolk, affects bottle fed babies only, and in over 80 per cent of the reported cases the age of the baby was under two months, but cases have occurred in babies up to the age of one year. It appears that the less acid is the babies gastric juice the more liable he is to develop this condition, because nitrate-reducing bacteria can then thrive, and reduce nitrates to nitrites in the upper intestine, which when absorbed into the blood stream combine with the blood and thus prevents the normal combination with oxygen. Affected babies are noticed to be a bluish colour about the lips and face (cyanosis). They may be lethargic and have their digestions upset, but are comparatively well despite their appearance. Failure to recognise the condition may lead to a diagnosis of pneumonia, or congenial heart disease, and cases have been reported to have terminated fatally for want of recognition when all that is required to affect a cure is to omit the offending water from the baby's feed.

A water containing 20 parts per million nitrate nitrogen is capable of giving rise to this condition, but serious cases are more likely to occur with concentrations much higher than this. A study of our records over the past twenty years dealing with water supplies reveals that 35 per cent of the water from 285 shallow wells contain 20 parts per million or more nitrate nitrogen, and 8 per cent of them have over 50 parts per million. A recent series conducted during the past few months reveals that of the 19 wells investigated, 15 were found to contain more than 20 parts per million, 7 had more than 50 parts per million, and 2 contained 116 and 120 parts per million respectively, nitrate nitrogen.

The origin of the pollution by nitrates has not been fully established, but is considered to be closely connected with pollution of the well by sewage matter of human or animal origin.

The first case in this district occurred during April 1953, at Great Bromley, in a baby aged four weeks, who developed cyanosis and who was thought to be suffering from pneumonia. She was admitted to hospital, and discharged later, having apparently made a full recovery, but the cyanosis returned within a few days of her return home. She was re-admitted to hospital. A report made by the hospital on this case reads as follows " This infant was found to have a trace of methemoglobin in the blood when she was admitted to hospital, at which time she was markedly cyanosed. Within two or three days the cyanosis disappeared without any specific treatment. The mother is now making up the feeds with tap water from the mains and since she started to do this there has been no recurrence of the cyanosis." Analysis of the well water showed that the nitrate content amounted to 80 parts per million.

The second case occurred at Weeley. A doctor, familiar with this condition, promptly diagnosed methemoglobinemia on seeing a three weeks old baby who developed a marked cyanosis during its first week on bottle feeding. I took the opportunity of seeing this case prior to its admission to hospital, where the diagnosis was confirmed. Analysis of the well water, which incidentally served six properties, revealed that the nitrate content amounted to 105 parts per million. The baby made a rapid recovery, and was soon home again. A mains water supply was obtained from a neighbour to prepare baby's feeds, while the property owners concerned were connecting to the nearby mains supply.

A few months prior to these two cases, a baby at Great Bentley developed cyanosis during its third week, its first on bottle feeds: It was admitted to hospital a few days later as a possible case of pneumonia. Similar cyanotic attacks occurred on baby's return home, and for some time the infant was under observation as a possible case of congenital heart disease. However, the symptoms ceased, and all suspicions were allayed soon after the family moved to a new council housing estate. The well water showed a nitrate content of 100 parts per million when analysed some months later, and it appears likely that the cyanosis in this case was due to methemoglobinemia.

A few parents who reared families at properties now known to have a well water supply heavily contaminated with nitrates were asked if they had noticed cyanosis in their babies at any time. One mother stated that she had noticed it in all three of her babies when she started them on bottle feeding, which in each case was at the age of seven months or so. Another mother, whose house was supplied with water from the same well, said that she had not seen any evidence of cyanosis in either of her two children. A third mother, whose baby was on bottle feeding from the beginning, frequently noticed that her baby was cyanosed after its feeds. She was advised that it was due to indigestion, and the cold weather at the time.

In order to prevent the occurrence of further cases of this condition, my Council has authorised the analysis of a sample of water for nitrates at all properties dependant on a shallow well water supply prior to the arrival of a new baby. This examination of the water will enable the Council to advise in advance of baby's arrival on the suitability or otherwise of a particular well water in the preparation of its feeds.

MAINS WATER

The chief source of the water supply to this district is from the Tendring Hundred Waterworks Company's deep wells situated at Dedham, which have come into operation during the past two years. Prior to this supply, the Company's wells at Lawford were the main source of supply for this area.. In the Parish of St. Osyth water may be supplied from two other shallow wells situated at Great Bentley and St. Osyth, which belong to the Clacton Urban District Council.

Bacteriological examinations made of the raw water before it passes into the distribution mains have proved satisfactory, and in addition, the water is chlorinated as an additional precautionary measure.

Chemical examination reveals that the quality of the water from the Dedham source is superior to that from the older Lawford works in that the hardness is almost halved, the chlorine content reduced to one fifth, and the carbon dioxide has been reduced to a low figure by aeration methods. Water from the Dedham bore should reduce appreciably the deposit of scale in domestic and industrial water heating apparatus, and minimise chemical reaction with the water mains which, in the past, has led to frequent complaints by consumers that the water supplied was occasionally discoloured.

This water cannot be softened further without the installation of expensive softening plant, and, it is estimated that a further reduction in hardness of 100 parts would involve an increase in the cost to the consumer of approximately 5d. per thousand gallons.

The district is now extensively provided with water mains, both in the statutory area of the Tendring Hundred Waterworks Company and elsewhere, and the position has been reached where it is uneconomic to carry out further extensions. This fact does not debar further extensions of water mains, but it makes the Council chary of embarking on further schemes, particularly because the numbers of properties connected to the mains laid by the Council has been disappointing, reaching only 50 to 60 per cent of the total properties adjacent to nearly 30 miles of water mains. The cost of laying mains is roughly between 25/- and 30/- per yard, and it is clear that a greater response by property owners is needed to help to meet in some degree the enormous cost involved.

Chemical Analysis in parts per million of the Area's Water Supply.

	Tendring Hundred Waterworks Company. Dedham Works. Maximum	Minimum
Colour	4	Nil
Reaction pH.	7.9	7.5
Electric Conductivity	875	850
Chlorine present as Chloride	132	116
Hardness. Total	280	265
Carbonate	255	250
Non-carbonate	25	15
Nitrate Nitrogen	0.0	0.0
Ammoniacal Nitrogen	0.30	0.21
Albuminoid Nitrogen	0.000	0.000
Metals. Iron	0.20	0.09
Turbidity	Less than 3	Nil
Odour	Nil	Nil
Free Carbon Dioxide	11	5
Total solids	565	550
Alkalinity as Calcium Carbonate	255	230
Nitrite Nitrogen	Less than 0.01	Absent
Oxygen absorbed	0.20	0.05
Residual Chlorine	0.30	0.14

RIVERS AND STREAM POLLUTION

66 Informal and 15 Statutory Notices were served during the year. The statutory notices were in respect of properties with a main sewer available.

SEWERAGE AND DRAINAGE

In the village of Ramsey 0.825 miles of new sewer was laid during the year and 81 properties reconnected.

Soil sewer (0.19 miles) and surface water sewer (0.12 miles) were extended on the St. Osyth Housing Site to provide service for 14 houses and 12 bungalows.

Work was commenced on the extension of soil and surface water sewers on the Mistley Housing Site to provide for 62 houses and bungalows.

Regarding the Little Clacton sewerage scheme there were 216 properties, including 28 Council houses, connected at the end of the year.

PUBLIC CLEANSING AND SALVAGE

(a) Refuse Collection is undertaken by direct labour to almost all properties throughout the rural district. Due to the erection of new properties, with more open planning, and increasing population, consideration will have to be given, in the future, as to how a service of weekly and fortnightly collections can be kept up. For some years it has been the practice to carry out weekly collections in the most built up areas and fortnightly elsewhere. It would seem that at least one greater capacity vehicle for some of the built up areas would be an advantage to avoid frequent unloading at the tips. The present three 10 cubic yard and one 7 cubic yard vehicles plus an open truck will need to be improved upon with the scale of the work arising.

Refuse is disposed of on three tips at Weeley, Lawford and Parkeston.

(b) Cesspool emptying has continued with the Council's one machine and 1,391 loads were dealt with. A charge of 10/–d. per load for domestic premises, 15/–d. where there is a sewer available, and £1.0.0 for trade premises is made ; the domestic charge being rather less than one half the actual cost. The demand is higher than one machine can reasonably cope with, and a second machine is under consideration.

Cesspool emptying machines are efficient so far as emptying is concerned, but there is always the problem of disposal, particularly in the winter months.

(c) Salvage collections were maintained at a fairly high level, particularly so far as tonnage is concerned:—

	Tons	Cwts.	Qrs.	Lbs.	£	s.	d.
Waste Paper	170	0	2	26	1,276	3	7
Textiles	1	7	0	0	30	18	11
Bones		13	0	0	2	12	0
Ferrous Metals	25	12	0	14	87	2	9
Non-Ferrous Metals			2	20		19	11
	197	13	2	4	1,397	17	2

Waste paper shows an increase of 31 tons and ferrous metals 17 tons over the year, 1952.

RATS AND MICE DESTRUCTION

The Council employ two part-time operators on this work. Sewers, sewage works and refuse tips are dealt with systematically. All infestations on domestic premises are treated free of charge but trade and agricultural properties are charged with full cost.

Infestations on agricultural properties are usually dealt with by the pests department of the Agricultural Committee and although the responsibility for the administration of the Prevention of Damage by Pests Act, 1949, relating to rats and mice, is the responsibility of the Council, providing there is good liaison, I do not think there is much need for alteration of procedure. No infestations, whether notified or discovered on inspection were left untreated on non-agricultural properties.

With proper administration of the 1949 Act and with the improved methods of poisoning it should be possible, with the full co-operation of the public, to almost exterminate rats and mice. Considering the vast destruction and spoiling of food stuffs that these pests are responsible for, together with the menace to health, extermination of them is an end very much to be desired.

Farmers should take full advantages of the services offered by the Agricultural Committee in having their premises treated.

Strict attention should also be given to the fencing of ricks at time of threshing and dismantling as required by the Threshing and Dismantling of Ricks Regulations, 1950. All practical steps must be taken to destroy rats and mice escaping from ricks and it must be noted that any person who fails to comply with the regulations is liable to a fine of up to £20 for a first offence and up to £50 for any subsequent offence.

It will be seen that any farmer who allows rats and mice to escape from a rick is guilty of serious offence and apart from that he is a bad neighbour if he allows other people's premises to become infested due to such negligence.

The number of infested properties treated by the Council were as follows:—

Council property (excluding Council Houses)	8
Dwelling Houses	148
Agricultural property	1
Business & Trade	3
	160

FACTORIES—DETAILS OF INSPECTION

	No. on Register	Inspections	Number of Written Notices
Factories without Mechanical power	11	2	—
Factories with Mechanical power	60	15	6
	71	17	6

DEFECTS

	Found	Remedied
Unsatisfactory water supply	1	1
Want of Cleanliness	5	5

SANITARY INSPECTION OF THE AREA

Nature of Inspection	Total Inspections	Notices Served Informal	Notices Served Formal
Houses Unfit	46	6	14
Houses Unfit (Revisits)	228		
Houses with Defects	172	44	
Houses with Defects (Revisits)	99		
Houses Drainage	300	60	15
Houses Sanitary Accommodation	6	6	
Houses Overcrowded	7	1	
Houses Dirty	8		
Houses Verminous	3		
Houses Satisfactory	1		
House Boats	39		
Improvements Grants	15		
Water Supplies	244	39	5
Water Samples Collected	62		
Schools	3		
Dairies	4		
Milk Samples taken	4		
Food Premises	64		
Bakehouses	17	6	
Camping Grounds	56	2	
Caravans	49		

Beach Huts and Shacks	4		
Infectious Disease Enquiries	25		
Refuse Tips and Deposits	32	1	
Specifically Premises Inspected for Rats and Mice	174		
Rat and Mice Infestations dealt with	160		
Polluted ditches	51	6	
Sewage Works....	2		
Ice Cream Premises	7		
Ice Cream Samples Collected	7		
Piggeries	5		
Slaughterhouses	1		
Number of Pigs inspected	53		
Number of Cattle inspected	2		
Number of Sheep inspected	3		
Miscellaneous	143	9	
	2,096	180	34

FOOD INSPECTION

(a) Unsound Food Surrendered:

	lbs.
Home Killed Meat	1,691¾
Imported Meat	535
Tinned Meat	90
Tinned Milk	9¾
Tinned Peas	7½
Tinned Fruit	61¼
Margarine	120
Lard	48
Cake Flour Mixture	18
Wet Fish	52½
Cheese	18
Sweets	126
Bacon	82
	2,859¾

(b) Food premises are inspected when possible and it is true to say that more attention is paid to hygiene by food handlers, but this is a matter that must continue to be emphasised since carelessness and indifference can be a great menace to health.

(c) Eight private slaughterhouses have yearly licences to enable emergency and private killing. Butchers are requested to notify private killings to enable the carcase and organs to be properly inspected. The law concerns inspection of carcases intended for sale but consumers of their own animals would be well advised to take advantage of inspection in their own interest.

MILK SUPPLIES

There are seventeen registered distributors supplying milk in the district of whom five have premises within the area.

The following designated milk licences were granted to retailers:—

Dealer's Licences Pasteurised Milk	4
Supplementary Licences Pasteurised Milk	6
Dealer's Licences Tuberculin Tested Milk	4
Supplementary Licences Tuberculin Tested Milk	8
Supplementary Licence Sterilised Milk	1

Producers and producer-retailers are now the concern of the Ministry of Agriculture, whereas formerly they were supervised by officers of the public health department who inspected all dairy farms in the area at regular intervals to make certain that milk was produced under hygienic conditions.

ICE CREAM

During the year 21 persons were registered to sell ice cream under the Essex County Council Act, 1933. The total number now registered is 103.

CARAVANS AND CAMPING GROUNDS

There are eleven camping grounds in the district; six at St. Osyth, three at Little Clacton, one at Lawford and one at Thorpe-le-Soken. In addition fourteen individual moveable dwelling licences have been issued during the year.

Due to the extensive damage caused by the floods the beach area camping grounds at St. Osyth were put to much less use during the year than normally.

SECTION D

HOUSING

Return for the period 1st January to 31st December, 1953.

Part A

	Number of Houses Demolished	Persons Displaced
Clearance Areas	3	Nil

Part B (Not included in Clearance Areas).

	Number of Houses	Persons Displaced
(1) Housing Act, 1936		
(a) Houses demolished as a result of formal or informal procedure under Section 11	3	6
(b) Houses closed in pursuance of an undertaking by the owners under Section 11, and still in force	2	7
(c) Parts of buildings closed	Nil	Nil
(2) Housing Act, 1949		
(a) Closing Orders made under Section 3(1)	Nil	Nil
(b) Demolition orders determined and closing orders substituted under Section 3(2)	Nil	Nil
(3) Local Government (Miscellaneous Provisions) Act, 1953 Closing Orders made under Section 10(1)	Nil	Nil

Repairs	Number of Houses
(4) Number of unfit or defective houses rendered fit during the period as a result of informal action by local authority under the Public Health or Housing Acts	56
Action under Statutory Powers	
(5) Public Health Acts Number of houses in which defects were remedied after service of formal notices	
(a) By owners	14
(b) By local authority in default of owners	1
(6) Housing Act, 1936 Number of houses made fit after service of formal notices (Sections 9, 10, 11 and 16)	
(a) By owners	1
(b) By local authority in default of owners	Nil

NEW HOUSES ERECTED DURING 1953

By Private Enterprise	56
By the Council	58
	114

Total permanent houses erected since 1946:—

1946	32
1947	102
1948	75
1949	84
1950	67
1951	77
1952	89
1953	114
	640*

* This total does not include 77 prefabs and 41 converted army huts.

Much new building is necessary to deal with the problem of unfit dwellings, of which there are many in the district. It is hoped that rent revision will enable improvement of many sub-standard dwellings that are capable of repair.

Some progress is being made to re-house families from unfit dwellings but to deal with the whole problem of slum clearance a fairly long term programme of systematic replacement is involved. Many of the unfit dwellings are occupied by elderly people and the erection of more aged persons bungalows would do much towards solving the problem at cheaper cost than building the traditional two and three bedroom types of houses, and this the Council have very much in mind. The rents of the traditional types of houses, despite the subsidies, does discourage many people from applying for them, and not infrequently they are not eager to move from unfit dwellings at low rents to pay the very much higher rents of Council houses.

It is hoped that rent revision will do something to encourage the repair of many poor dwellings to avoid continued deterioration which in course of time merely adds more and more to the list of dwellings needing replacement. Whether the proposed rent revision will encourage owners of low rated property remains to be seen, but it would appear to be doubtful. Indeed, for a very long time many owners of the poorer types of dwellings have ceased to regard them as economic to maintain, and the increase permitted with low rated dwellings is very small compared to the cost involved.

The Council has also to face expensive sewerage schemes in various parts of the district to meet the present day problems of dealing with house drainage now that water supplies and modern sanitary arrangements are generally provided throughout the district.

Housing and sewerage are the main problems to be dealt with, and must of necessity add to the burden of the rates if conditions are to be brought up to a good standard and above reproach.

SECTION E

SHELLFISH (MULLUXAN)

During 1953, 1,493,831 Oysters were passed through the Purification Tanks at Brightlingsea.

The number for the previous years were :

1952	1,510,952
1951	1,948,775
1950	1,762,404
1949	1,757,793
1948	2,044,741
1947	1,294,900
1946	2,325,364
1945	1,665,347
1944	943,082
1943	940,658
1942	809,600
1941	2,055,714

SECTION F

PREVENTION AND CONTROL OF INFECTIOUS AND OTHER DISEASES

Disease	Total cases notified	Cases admitted to hospital	Total deaths
Erysipelas	2	—	—
Encephalitis	1	1	1
Food Poisoning	1	1	—
Infective Hepatitis	45	—	—
Measles	363	5	—
Poliomyelitis	1	1	—
Pneumonia	21	—	—
Scarlet Fever	32	6	—
Whooping Cough	59	2	—
Totals	525	16	1

INFECTIOUS DISEASES

A total of 525 cases of notifiable infectious diseases were notified to me during the year. One doctor notified 118 cases, and the next highest number received was 92. Two doctors notified more than 70 cases each. No notifications were received from three medical practitioners who live and practice in this district.

Every medical practitioner has a statutory obligation (Public Health Act, 1936, Sec. 114, (I) (b).) to notify at once certain infectious diseases to the District Medical Officer of Health to enable him to control their spread, and if all medical practitioners gave full consideration to this responsibility, particularly with regard to early notification, a diminution in the prevalence of such diseases might be brought about.

MEASLES

This disease was prevalent in the district during the year, accounting for 363 of the total number of notifications received. This disease was prevalent throughout the country, and our rate per thousand of the population is only slightly above the national figure.

INFECTIVE HEPATITIS

This disease is becoming increasingly common, and 45 cases were notified during the year, particularly during the last two months, when an epidemic occurred at the Primary School, Thorpe-le-Soken. This disease, characterised by jaundice and dark urine, is most frequent in children of school age and young adults, but it can occur at any age. Most cases recover in two to three weeks. There is no specific treatment. The disease is usually spread by person to person contacts, but as the virus responsible for the disease can be found in the stools and urine, it is important to practice a high standard of personal and environmental hygiene in order to prevent the spread of this disease.

The disease has a long incubation period (25 to 35 days), and infectivity is greatest in the early stages, before the onset of jaundice.

The disease occurred in 70 of the 185 pupils at Thorpe-le-Soken Primary School during the winter months, an attack rate of approximately 40 per cent. In order to limit the spread of the disease a careful day to day watch was kept for pupils who might be in the early stages, and those with suspicious symptoms were excluded from school and referred to their own doctors. They were allowed to return to school after one week if the disease did not appear during that time. Total exclusion of child contacts is not a practicable procedure as it would occasion an unjustifiably great loss of schooling time, but latterly those school child contacts who were not sitting for an examination for a year or more were excluded for five weeks. Many household contacts suffered an attack of this disease, and multiple cases in the same house was common. Fortunately, the disease limited itself to this school, and did not spread to the senior schools in the neighbourhood. The Medical Research Council are engaged on research into this disease, and I was able to assist in a small way in this project by collecting samples of blood from patients who volunteered to help in this research.

DIPHTHERIA IMMUNISATION

Nowadays, because of immunisation, the fear of diphtheria attacking their children has been banished from the minds of most parents. This happy state of freedom from fear has mainly been brought about by the National Diphtheria Immunisation Campaign, now little more than ten years old. The success of this campaign speaks for itself when it is pointed out that in England and Wales in 1940 there were 2,480 deaths from diphtheria, whereas, in 1952 this figure was reduced to the extraordinary low level of 32. In addition, the amount of suffering and sorrow which has been spared cannot be calculated. The continued success of this life saving campaign can only be maintained with the co-operation of the parents who should have their children protected against diphtheria without delay. Immunisation will be carried out by your family doctor, or at the nearest infant welfare clinic.

During 1953, 248 children between nine months and five years, and 145 between five and fifteen were immunised by family doctors and welfare clinics.

WHOOPING COUGH

59 cases of this disease were notified, which is more than last year's figure (23), but less than the total of 150 which occurred during 1951. An intensive immunisation campaign got under way during the second half of the year, and has proved very popular with parents. During that time 102 children in the Tendring area received the full course of three injections, at monthly intervals, and we may expect a reflection of this preventive work in lower numbers of cases in future years.

SCARLET FEVER

32 cases of this disease were notified during the year compared with 71 for the previous year. The organism responsible for this condition lodges in the throat and nose, and it is a comparatively simple matter to demonstrate the presence or otherwise of the germ by bacteriological methods. Patients and contacts of this disease should be free from symptoms, and their nose and throat swabs negative before permission to return to school, or to certain occupations, is granted.

TUBERCULOSIS 1953

Age groups of the 15 cases notified and four deaths during the year are given in the table below :—

Age Groups in Years	New Cases				Deaths			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	M.	F.	M.	F.	M.	F.	M.	F.
0–1	—	—	—	—	—	—	—	—
1–5	—	—	1	2	—	—	—	—
5–10	—	—	1	—	—	—	—	—
10–15	—	—	—	1	—	—	—	—
15–20	1	—	—	—	—	—	—	—
20–25	2	—	1	—	—	—	—	—
25–35	1	—	—	2	—	1	—	—
35–45	—	—	—	1	—	—	—	—
45–55	1	—	—	—	—	—	—	—
55–75	—	—	1	—	3	—	—	—
Totals	5	—	4	6	3	1	—	—

New Cases 15 Deaths 4

New cases of Tuberculosis and deaths since 1940 :—

Year	New Cases	Deaths
1940	25	7
1941	33	11
1942	30	13
1943	39	11
1944	34	9
1945	32	8
1946	25	5
1947	29	7
1948	28	4
1949	25	3
1950	22	2
1951	14	7
1952	19	2
1953	15	4

The following figures give the number of cases on my Register at the end of 1953 :—

Respiratory	Male	57	Non-Respiratory	Male	26
,,	Female	23	,,	Female	31
		80			57

TOTAL CASES ON REGISTER AT END OF 1953 137

The age groups of the cases on the register are as follows:—

Age groups in years	Respiratory		Non-Respiratory		Totals
	M.	F.	M.	F.	
1—5	—	—	6	5	11
5—15	2	2	10	13	27
15—25	11	13	2	3	29
25—35	11	4	2	4	21
35—45	14	2	2	2	20
45—55	11	2	1	2	16
55—65	5	—	2	1	8
65 and upwards	3	—	1	1	5
Totals	57	23	26	31	137

During 1953 fifteen new cases of this disease were notified, as compared with nineteen for the previous year. In five of these cases the disease was sited in the lungs, and superficial glands were involved in another six. In two cases infection of the spine was present, and in the remaining two cases tuberculosis of the abdomen was found.

A recent Ministry of Health memorandum states that deaths from tuberculosis have been falling rapidly during the last five years but so far, this improvement has not been accompanied by a comparable reduction in the number of notifications.

There are two main sources of this infection, namely contact with an active case of respiratory disease, and in areas where milk is not all pasteurised, the consumption of raw milk containing live tubercle bacilli. From the point of view of the community at large the infected individual should ideally be isolated until he ceases to be infective, but this may conflict violently with the patient's own interests. It is not practicable to isolate all such persons in institutions nor would it be justifiable to do so in a large proportion of the persons who are infective at any one time. Nevertheless, patients suffering from pulmonary tuberculosis should be treated under conditions which reduce to a minimum the risk of infection of others.

Action to eliminate bovine tuberculosis infection is proceeding, but it would appear that the only really safe milk is that which has been efficiently pasteurised.

It is essential that home conditions are suitable for cases that require segregation rather than treatment, as such persons should occupy a room to themselves, and the provision of a better house may be a necessity in any scheme for the prevention of tuberculosis.